

UNIO BROWNII. Testâ lævi, obovatâ, valdè compressâ, valde inæquilaterali; valvulis subcrassis; natibus prominulis, costis divaricatis; epidermide tenebroso-viridi, striatâ; dentibus cardinalibus submagnis, in utraque valvis duplicis; lateralibus lamellatis, sublongis curvisque; margaritâ albâ.

Hab. Mocha? Asia. Capt. George Brown.

UNIO SUAVIDICUS. Testâ lævi, oblongâ, subcompressâ, valdè inæquilaterali, anticè rotundatâ, posticè truncatâ, natibus subprominentibus, costis elevatis; epidermide luteo-olivâ, minutè striatâ; dentibus cardinalibus parvis, compressis, crenulatis, in utraque valvis duplicis, lateralibus longis, lamellatis subrectisque; margaritâ cæruleo-albâ et iridescente.

Hab. River Amazon. Mr. E. Verreau, Paris.

UNIO UMBROSUS. Testâ lævi, ellipticâ, subinflatâ, inæquilaterali; valvulis subcrassis; natibus prominulis; epidermide castaneâ, politâ, transversè fasciatâ; dentibus cardinalibus magnis, subelevatis; lateralibus longis, lamellatis subcurvisque; margaritâ vel purpureâ vel roseâ et iridescente.

Hab. Medellin River, Mexico. M. Burrough, M. D.

Description of a new Snake from Illinois.

By ROBERT KENNICOTT. •

REGINA KIRTLANDII.

The body of this species is somewhat trigonal in cross sections, (flattened on the abdomen,) and tapers gently from the middle to either extremity. There is no distinction of neck, and the very small head calls to mind that of the *Coluber amoenus* of Say. It is, however, much larger, and the scales are very strongly carinated. The carinæ are found on all the longitudinal rows of scales, of which there are nineteen exclusive of the belly scales; the external row is almost as sharply keeled as those on the back, even to the tip of the tail. The dorsal scales are narrow and elongated, the sides nearly parallel except near the ends.

As already stated, the head is very small. The vertical plate is sub-hexagonal, the two anterior sides forming a very obtuse angle; the external edges are slightly convergent posteriorly. The nostrils in the middle of the two plates. There is one ante-orbital and two post-orbitals; there are six labials above and seven below, in addition to the rostrals.

The ground color of this snake is a light purplish brown, with four rows of large nearly circular blotches covering the whole back and sides. They are arranged so as to alternate; the outer blotches on the outer row are a little larger than those on the two central ones, and are of the width of four or five scales. The belly is of a pale brick red, (fading to brownish yellow in alcohol,) with a well defined blotch of black near the exterior of each scale. These give rise to a series of very well defined round black spots on either side of the abdomen; and there is also an obscure series of dark blotches on the anterior edge of the scales in the exterior dorsal row. The dots in this series are separated by intervals of two unmarked scales. The spots of this row alternate with those of the larger series immediately above.

On separating the scales, the skin is seen to be colored like the adjacent scales. It is black in the dark blotches and very light in the intermediate space, giving rise to the appearance of whitish edges to the scales.

There are thus four series of large spots on the back and sides, two on the belly, and two in the exterior dorsal rows, making eight in all. The last mentioned row is sometimes very obscure, the others are always distinct.

I refer this serpent to the genus *Regina* of B. and G., although it is different in some respects from the other known species. It is somewhat like the *R. rigida*, but is differently marked; the latter having the two abdominal rows close together on the middle of the belly, instead of being separated. Neither is there

any indication in *R. rigida* of the four series of dorsal blotches. In fact, there is no North American species more strongly marked than this.

Abdominal scales 133, the last one divided; subcaudal 59. Dorsal rows of scales 19. Length $19\frac{1}{2}$ inches, of which the tail measures $4\frac{1}{2}$ inches.

As yet, this species has only been detected in Northern Illinois, where it is rarely met with. The few specimens obtained have been found in the woods, generally under logs.

This snake is rather sluggish, and, like *Regina Grahamii* of B. and G., is not very pugnacious.

In giving to this serpent the name of Dr. Kirtland, as a slight token of the respect due him, to whose enthusiastic and untiring devotion to Science the West owes so much, I would also make some expression of my personal gratitude to the honored teacher, whose kind encouragement and instruction led me to study Nature, by dedicating to him his pupil's first contribution to Science.

Description of several new genera and species of Fossil Fishes, from the Carboniferous Strata of Ohio.

By J. S. NEWBERRY, M. D.

MECOLEPIS Newberry.

Heterocercal lepidoids of small size. Body fusiform. Head obtuse. Tail elongated. Lobes very unequal. Fins small and provided with delicate fulcra. Dorsal opposite anal or nearly so, both set far back in body. Cranial surface ornamented by corrugations, tubercles or granulations. Opercular, maxillary and hyoid plates ornamented with convoluted corrugations of the surface in various patterns.

Scales smooth, or ornamented; posterior margin of lateral scales all or in part serrated. Scales of median line above and below characteristically angled or crenulated. Two rows of scales on sides extending back to near anal fin, remarkably high, vertical 2 to 5 times longitudinal diameter.

Lateral line nearly straight, passing the upper part of lower row of high scales.

Teeth conical, short, *en brosse*.

The peculiar group of fishes to which I have given the generic name of *Mecolepis*, apparently represents the *Palæonisci* in the ichthyic fauna of the locality where they occur. From *Amblypterus* and *Elonichthys* they may readily be distinguished by their small fins all bearing fulcra. With *Palæoniscus* their affinities are closer, but the *ensemble* of characters presented by the large number of specimens which I have examined, seem to separate them from that genus. Among these diagnostic characters the most conspicuous are their small size, posterior position of dorsal fin and especially the high lateral scales.

1. *M. CORRUGATUS* Newb. Body fusiform, robust. Length 3 in. 4 lines; breadth 10 lines. Length of head 8 lines. Anterior lateral scales $2\frac{1}{2}$ times as high as long. Cranial plates ornamented by convolutions of fine, thread-like corrugations. Maxillary bones, opercular and hyoid plates corrugated much as superior surface of head. Scales smooth, except a few on the anterior dorsal surface, which are finely striate and punctate. Posterior margins of lateral scales as far back as anal and dorsal fins serrated. Scales of tail, like most of those of the dorsal and ventral surfaces, plain on surface and margins. Anterior margin of anal fin opposite centre of dorsal fin; longest rays of anal fin when collapsed just reaching base of caudal fin.

2. *M. TUBERCULATUS* Newb. Body fusiform. Entire length 3 inches. Head 6 lines. Tail 8 lines.

Cranial plates strongly tuberculated; tubercles rounded elongated and reniform. Surfaces of opercular, maxillary and hyoid bones covered with linear parallel corrugations.

Surface of all the scales of the body smooth, except a few on the anterior